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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,906	05/22/2001	Veijo Vantinen	324-010361-US(PAR)	8729
2512	7590	07/27/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			KHUONG, LEE T	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,906

Applicant(s)

VANTTINEN, VEIJO

Examiner

Lee Khuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11 and 13-18 is/are rejected.
- 7) ☐ Claim(s) 3 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: on page 4, line 9, the word --or a first party-- is suggested to be changed to --or the first party--. Appropriate correction is required.
2. Claims 3 and 12 are objected to because of the following informalities: on pages 5 and 7, line 2, the word --is similar to the logical link-- is suggested to be changed to --is the logical link--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-2, 4-11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havinis et al. (US 6,311,069), hereafter is referred as Havinis in view of King et al. (US 6,313, 787), hereafter is referred as King .

Regarding claims 1 and 10, Havinis teaches a System and Method For Alerting A Mobile Subscriber Being Positioned. Havinis' system and method comprise:

a data is transmitted using a data transmission link (210, Fig. 3, a data link layer) between user equipment or a first party (20, Fig. 3, a MS) of the radio system and a serving mobile location center of a radio network or a second party of the radio system (270, Fig. 5, a smlc, see col. 4, line 49 – col. 5, line 25), and in the method the data to be transmitted is placed in a message of a third-layer radio resource protocol (215, Fig. 3, a network layer 215 with sub-layer radio resource 220) set on top of a packet protocol stack residing in the first party of the data transmission link (Fig. 3, see col. 4, line 49 – col. 5, line 25, the network layer 215 is set on top of a packet protocol stack of the data link layer),

the radio resource protocol message is transmitted to the radio network using a logical link control protocol (210, Fig. 3) set on the second layer of the protocol stack (see col. 4, line 49 – col. 5, line 25 and col. 8, line 53 – col. 9, line 7).

Havinis does not expressly teach *a logical link control protocol relay set on the second layer of the packet protocol stack in the radio network directs the logical link protocol message to a second party of the data transmission link, the second-layer logical link control protocol residing in the second party and set on the packet protocol stack transmits the radio resource*

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protocol message to the radio resource protocol set on the third layer, and the second party disassembles the transmitted data from the radio resource protocol message.

King teaches a *logical link control protocol relay* (110, Fig. 4, **the RELAY protocol of BSC**) set on the second layer (SCCP, Fig. 4, **a layer 2**) of the packet protocol stack in the radio network (110, Fig. 4, **the BSC**) directs the logical link protocol message (**a message in layer 2 of MS 104**) to a second party of the data transmission link (**the SMLC, 112, Fig. 4, col. 9, lines 4-6, BSC forwards a RRLP ACK message to the SMLC**),

the second-layer logical link control protocol (the layer 2 SCCP, Fig. 4) residing in the second party (the SMLC 112, Fig. 4) and set on the packet protocol stack transmits the radio resource protocol message to the radio resource protocol (the RRLP at the third layer of SMLC) set on the third layer (see col. 8, lines 23-37 and col. 8, line 59 – col. 28), and

the second party (the SMLC 112, Fig. 4) disassembles the transmitted data from the radio resource protocol message (inherently disassembles the transmitted the message from MS 104 to the RRLP layer of the SMLC 112).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the GPS positioning as taught by King into Havinis to arrive the claimed invention as specified in claims 1 and 10.

The suggestion/motivation for doing so would have been to provide an accurate positioning of a mobile station in a wireless telecommunication system (see col. 1, lines 40-47).

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Regarding claims 2 and 11, King teaches *the radio resource- protocol is a radio resource location service protocol* (RRLP, Fig. 4, col. 8, lines 65-67, col. 9, lines 1-4, **BSC forwards the RRLP assistance data message to the MS**).

Regarding claims 4 and 13, the frame of a logical link control protocol inherently has its own cell identifier (*service access point identifier*) since each MS belongs to a cell which is under control of each base station that is identifiable within the wireless communication system by a unique identifier.

Regarding claims 5 and 14, each logical link control protocol frame inherently contains a header (*separate address space*) in which separate fields are designated for a source and a destination address.

Regarding claims 6 and 15, in order for the BSC to know which destination address it needs to forward/relay a MS message to, the BSC must determine (*examines*) from the message/frame header for the destination address, which has been explained in the rejection of claims 4 and 13. Using the determined destination address, the BSC forwards the frame to its destination, which is the SMLC in this case.

Regarding claims 7 and 16, a RRLP message is inherently encapsulated from a layer 3 to a layer 2 prior to its transmission state, therefore, the message must be encrypted for a transmission to take place according to the 7-layer of an OSI model.

Regarding claims 8 and 17, King teaches *the logical link control protocol in the serving mobile location center (the SMLC 112, Fig. 4) supports more than one simultaneous radio resource protocol entities (the SCCP and the BSSLAP-LE 112, Fig. 4, col. 8, lines 28-37, the logical link control protocol in the SMLC supports multiple protocol including SCCP and BSSLAP-LE protocols)*

Regarding claims 9 and 18, King teaches *request to define the location of a mobile station (in the step 428, Fig. 5, col. 9, lines 10-11, the SMLC sends a RRLP measure position request to the BSC), message to provide the location of a mobile station (in the step 432, Fig. 5, col. 9, lines 21-23, the GPS location estimate/measurements are returned to the BSC in a RRLP MEASURE POSITION response), message containing data assisting in location (in the step 430, Fig. 5, col. 8, lines 65-67, the BSC forwards the assistance data to the MS in a RRLP ASSISTANCE DATA message), acknowledgement of data assisting in location (in the step 432, Fig. 5, col. 9, lines 2-4, the MS acknowledges the reception of complete assistance data to the BSC with a RRLP ASSISTANCE DATA Acknowledgement message), and protocol error message (see col. 9, lines 24-25, if the MS was unable to perform the necessary measurements, or compute a location, a failure notification message is returned).*

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Allowable Subject Matter

6. Claims 3 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach a system and method for transmitting data in a packet-switched radio system implementing a user equipment location service, wherein the data is transmitted using a data transmission link between user equipment or a first party of the radio system and a serving mobile location center of a radio network of the radio system, in which a logical link control protocol is the logical link control protocol between a mobile station and a support node belonging to the core network of the radio system in a public packet radio service.

Response to Arguments

8. Applicant's arguments with respect to claims 1-2, 4-11 and 13-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

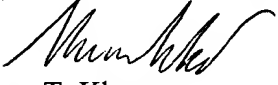
Hwang et al. (US 6,791,963) is cited to show system and method of Data Transmission In Packet-Switched Radio System Implementing User Equipment Location Service, which is considered pertinent to the claimed invention.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Khuong whose telephone number is 571-272-3157. The examiner can normally be reached on 9AM - 5PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lee T. Khuong
Examiner
Art Unit 2665



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